



Mission Survival

GRADE LEVEL

Summer Camp, rising 5th-7th graders.

DURATION

30 minutes

SCHEDULED TIME

Friday, 11:30 a.m.

CONTENT OVERVIEW

To survive in a hostile environment, basic human requirements must be met. Earth's atmosphere provides the air we need to breathe, atmospheric pressure that the human body requires to function, and protection from much of the harmful radiation from the Sun. On Earth, some basic human needs include food, water, shelter, and clothing. The body can go without food longer than it can go without water. Shelter provides protection from the elements such as extreme temperatures and inclement weather. Likewise, proper clothing allows humans to live and function in comfort. Usually, these needs are easily met. However, in extreme situations, humans must prioritize their needs in order to survive. Tools, resources, and skills may be necessary to obtain food and water or to construct proper shelter and make clothing. Communication can be key to survival as well. In a hostile environment, successful teamwork may be all that stands between the life and death of individuals.

ESSENTIAL QUESTION

Why is reaching consensus and prioritizing essential to making team decisions?

OBJECTIVE

Campers will be able to:

- ◆ Discuss and reach consensus on items to include in a survival kit in an emergency situation.
- ◆ Decide, evaluate, and formulate problem solving skills to plan a course of action.

- ◆ Establish criteria for the contents of a survival kit.
- ◆ Identify hostile environmental elements to be overcome in Antarctica.
- ◆ Compare and contrast the hostile environment of Antarctica to other places on Earth or in the Solar System.

MATERIALS

Per student:

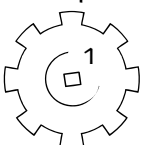
- ◆ Journal page
- ◆ One pencil

PREPARATION & MANAGEMENT

1. Based on the scenario, students will plan what they would do. Each group must reach consensus. Should they stay put near the plane or head for the base camp?
2. Student/teams will need to come to consensus on their answers (i.e., complete agreement).
3. Have students put a star next to the essential items for their survival kit.
4. As a class or in groups of six, have students answer the questions on the student worksheet.

EXTENSION

1. Encourage the students to create their own list of items to rank order.
2. Plan and create a first aid kit for home use.
3. Find out the skills needed for wilderness survival training, where a person spends several days alone living off the land.
4. What contingency plans are in place for the Space Shuttle, the International Space Station, or a space suit?
5. What can your class do to help those that survive a natural disaster?



Mission Survival

Life in a hostile environment requires careful thinking and planning to meet human survival requirements. In many respects, Antarctica is an excellent training ground for a long duration, human mission on Mars. Like Mars, Antarctica is barren and typically very cold. Unlike Mars, Antarctica has air, atmospheric conditions fit for humans, and access to water.

You are part of a six-person crew on its way to Antarctica to collect meteorites, which are easily found in the white snow. Just short of base camp, the plane develops electrical problems and crashes. Miraculously nobody is seriously injured, but all radio communication has been permanently damaged.

The pilot estimates that the team is approximately a five-day walk from base camp. Another plane with a second crew will be flying out to camp in two weeks.

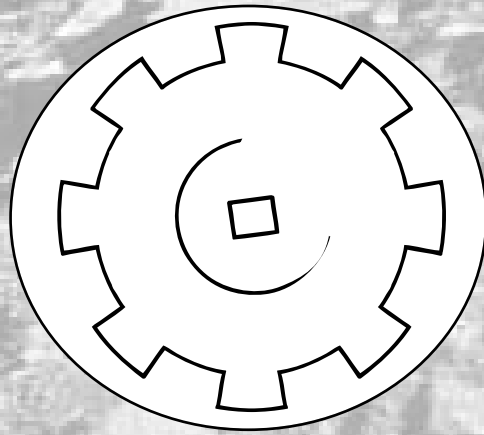
1. As a class or in groups of six, answer the questions below. You will need to come to consensus on your answers (i.e., complete agreement).

Based on the scenario above, plan what you would do. Your group must reach consensus. Should you stay near the plane or head for the base camp?

2. The items below survived the crash. If you decide to head for base camp, you can only take what you can carry with you to survive until you can get help or be rescued. What items are essential for your survival kit?

Put a star next to the essential items for your survival kit.

- | | |
|---|--|
| <input type="checkbox"/> Parachutes (2) | <input type="checkbox"/> Campstove |
| <input type="checkbox"/> Matches (1 book) | <input type="checkbox"/> Dehydrated food (2 boxes of 4 dozen packages) |
| <input type="checkbox"/> Sleeping bags (2) | <input type="checkbox"/> Scissors |
| <input type="checkbox"/> Long underwear | <input type="checkbox"/> Twine |
| <input type="checkbox"/> Water (12 gallons) | <input type="checkbox"/> Canned chili (2 boxes of 48 cans) |
| <input type="checkbox"/> Pick axe | <input type="checkbox"/> Mess kits (6) |
| <input type="checkbox"/> Flashlight | <input type="checkbox"/> Make-up compact with mirror |
| <input type="checkbox"/> Candy bars (1 box of 24) | <input type="checkbox"/> Flare gun |
| <input type="checkbox"/> Fruit (1 crate of bananas) | <input type="checkbox"/> Portable radio |
| <input type="checkbox"/> Hammer | <input type="checkbox"/> Thermal boots |
| <input type="checkbox"/> Screwdriver | <input type="checkbox"/> Duct tape |
| <input type="checkbox"/> Nails & screws | <input type="checkbox"/> Collection bags |
| <input type="checkbox"/> Shovel | |



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Student Task Card

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1. As a class or in groups of six, answer the questions below. You will need to come to consensus on your answers (i.e., complete agreement).

Based on the scenario above, plan what you would do. Your group must reach consensus. Should you stay near the plane or head for the base camp?

2. The items on your journal sheet survived the crash. If you decide to head for base camp, you can only take what you can carry with you to survive until you can get help or be rescued. What items are essential for your survival kit?